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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,067	03/19/2004	Ralph J. Weilbacher JR.	DN 3706	7924

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EXAMINER

HUNNINGS, TRAVIS R

ART UNIT PAPER NUMBER

2632

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/805,067

Applicant(s)

WEILBACHER, RALPH J.

Examiner

Travis R. Hunnings

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8, 9 and 11-14 is/are rejected.
- 7) ☒ Claim(s) 4, 7, 10 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Regarding claim 9, the phrase "at least about" renders the claim indefinite because it is unclear about the specific size that is being claimed. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5, 6, 8, 9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kintz (US Patent 4,187,634) in view of Farrell et al. (Farrell; US Patent 6,445,301).

Regarding claim 1, Kintz discloses *Animal Trap For Capturing Burrowing Animals* that has the following claimed limitations:

The claimed apparatus for placement over a portion of a soil surface overlaying a portion of a mole tunnel is met by the animal trap as shown in figure 1.

However, Kintz does not specifically disclose the claimed sensor and circuitry for detecting movement of the portion of the soil surface indicative of passage of a mole through the underlying tunnel portion and generating a signal representative thereof. Farrell discloses *Electronic Pest Monitoring System And Method* that teaches an electronic pest monitoring device employing a passive infrared pest detector for use with a bait box which detects the motion of a pest moving in the vicinity of the detector (column 2, lines 18-67 and column 3, lines 1-11). Adding the electronic pest monitor to the structure of Kintz would allow the user to know when a pest was captured and let the user deal with it in a timelier manner. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Kintz according to the teachings of Farrell to include an electronic sensor to detect movement of a mole in the vicinity.

Regarding claim 2, the claimed apparatus comprising a concave shell having elongate lower edge portions and an upwardly extending semi-cylindrical inner surface extending between the lower edge portions defining a space, the lower edge portions being positionable on the soil surface adjacent opposite sides of the portion of the soil surface overlaying the mole tunnel, respectively, such that the portion of the soil surface overlaying the mole tunnel is located in the space is met by the structure of the animal trap as seen in Kintz figure 1.

Regarding claim 3, it would have been obvious to one of ordinary skill in the art to place the electronic sensor in the cavity of the shell in the upper portion of the inner cylindrical surface connecting with the space wherein the sensor is located in the cavity so as to project downwardly into the space in a position over the portion of the soil so as to be contacted by upward movement thereof because the electronic sensor of Farrell is a passive infrared sensor and would have to have line of sight to the area where the movement would be detected and it is obvious that the place to put the sensor is in the interior of the animal trap. The claimed phrase "so as to project downwardly into the space in a position over the portion of the soil so as to be contacted by upward movement thereof" is interpreted to mean a sensor being aimed at the soil underneath the device so that upward movement triggers (contacts) the sensor.

Regarding claim 5, Kintz discloses all of the claimed limitations except for the claimed sensor including an actuator which operates a transmitter to emit a signal when movement of the portion of soil is detected and the mole detector additionally includes a receiver separate from the transmitter operable for receiving the signal and responsively emitting a second signal. Farrell teaches using a transceiver and remote receiver that communicate together when a pest is detected in order to remotely alert a user that movement was detected by the electronic pest monitoring device (column 2, lines 18-67 and column 3, lines 1-11). Adding a transceiver and remote receiver to the device would allow the user to be notified of a pest detection at a remote site and would give the user

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more flexibility with the use of the device. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Kintz according to the teachings of Farrell to include a transmitter and a remote receiver that alerts the user remotely when a pest is detected.

Regarding claim 6, the examiner takes official notice that it is well known to use magnetic proximity switches such as reed switches in order to actuate electronic circuitry.

Regarding claim 8, Kintz discloses the following claimed limitations:

The claimed concave shell including spaced apart lower edges extending between opposite open ends, the lower edges being positionable on a soil surface on opposite sides of soil above a mole tunnel such that the concave shell overlays the soil above the tunnel is met by the structure of the animal trap as seen in Kintz figure 1.

However, Kintz does not specifically disclose the claimed sensor operable for detecting movement of the soil underlying the shell indicative of movement through or presence of a mole in the tunnel below and changing a state. Farrell teaches an electronic pest monitoring device employing a passive infrared pest detector for use with a bait box which detects the motion of a pest moving in the vicinity of the detector and remotely alerts a user (column 2, lines 18-67 and column 3, lines 1-11). Adding the electronic pest monitor to the structure of Kintz would allow the user to know when a pest was captured and let the user deal with it in a timelier manner. Therefore it would

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have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Kintz according to the teachings of Farrell to include an electronic sensor to detect movement of a mole in the vicinity.

However, Kintz still does not specifically disclose the claimed transmitter operable when the state is changed for transmitting a signal representative thereof and a receiver operable for receiving the transmitted signal and outputting a signal indicative thereof. Farrell teaches using a transceiver and remote receiver that communicate together when a pest is detected in order to remotely alert a user that movement was detected by the electronic pest monitoring device (column 2, lines 18-67 and column 3, lines 1-11). Adding a transceiver and remote receiver to the device would allow the user to be notified of a pest detection at a remote site and would give the user more flexibility with the use of the device. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Kintz according to the teachings of Farrell to include a transmitter and a remote receiver that alerts the user remotely when a pest is detected.

Regarding claim 9, the claimed space between the lower edges of the concave shell has a horizontal extent between the lower edges which is at least about 3 inches would have been an obvious design choice to one of ordinary skill in the art.

Regarding claim 11, the claim is interpreted and rejected as claim 6 stated above.

Regarding claim 12, the claim is interpreted and rejected as claim 5 stated above.

Regarding claim 13, the claim is interpreted and rejected as claim 8 stated above.

Regarding claim 14, the claimed change of state comprising operation of a switch is met by the electronic pest monitor employing a passive infrared pest detector or other types of electrical, optic or electrical/mechanical detectors. It would have been obvious to one of ordinary skill in the art that a switch is an electrical/mechanical detector.

Allowable Subject Matter

5. Claims 4, 7, 10 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dahlman, *Mole Trap*, US Patent 4,827,662;

Barber et al. *Sensing Devices, Systems, And Methods Particularly For Pest Control*, US Patent 6,914,529;

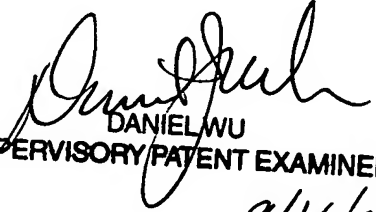
Barber et al. *Pestcontrol Devices, Systems And Methods*, US Patent Publication 2001/0054962.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRH


DANIEL WU
SUPERVISORY PATENT EXAMINER
9/16/05